



A.D. 1866, 10th APRIL. N° 1026.

S P E C I F I C A T I O N

OF

GEORGE WILLIAM SKINNER.

UTILIZING SEWAGE.

LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,

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Price 4d.

1866.



A.D. 1866, 10th APRIL. N^o 1026.

Utilizing Sewage.

(This Invention received Provisional Protection only.)

PROVISIONAL SPECIFICATION left by George William Shinner at the Office of the Commissioners of Patents, with his Petition, on the 10th April 1866.

I, GEORGE WILLIAM SHINNER, of the Strand, in the County of Middlesex,
5 do hereby declare the nature of the said Invention for “IMPROVEMENTS IN
THE MEANS OF AND APPARATUS FOR UTILIZING SEWAGE MATTERS AND LIQUIDS,”
to be as follows :—

This Invention relates to certain improvements in the means of utilizing
sewage matters and liquids, and in the apparatus to be employed for such
10 purpose. I propose to form a tubular branch or branches with the main
sewer in order to convey the sewage matters and liquids to a suitable building
in which the apparatus for utilizing the same is to be arranged. Such branch
or branches before entering the building are passed through a reservoir for
the purpose of discharging the contents of the sewer on the occurrence of a
15 storm or heavy fall of rain; this is effected by means of a valve in the branch
passing through the reservoir; the branch pipe then enters the building and
is connected to a hinged guiding trough which conducts the sewage over one,
two, or more tanks of galvanized iron having moveable strainers placed on
their surfaces; these tanks are capable of being lifted out of an outer series
20 of fixed tanks by means of chains travelling over pullies in the roof of the
building and by winch gearing. These outer tanks or jackets are surrounded
by a low dwarf wall forming four sides of a brick tank having a cage con-
taining gravel along the top thereof; around the wall a sunken gutter is

Shinner's Improvements in Utilizing Sewage.

formed, two inches below the level of the dwarf wall, in order to conduct the liquid to a fall, and underneath an upward filter bed through which the liquid percolates and passes beyond on to a perforated floor through which the liquid falls on to a downward chemical filter bed, and thence to a leading-off drain. The inner tanks when lifted are passed on to a tramway; they are provided 5 with small running wheels, in order to travel on the tramway, whence they are tilted over and discharge their contents into a sifting house, where foreign substances are separated from the sewage matter, which is ultimately conveyed to a preparing house and dried and treated as required for use, and packed in sacks or barrels. In order to withdraw the sewage from the 10 reservoir, pumps are employed, and the sewage is conveyed to the tanks and filtering apparatus.

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Printers to the Queen's most Excellent Majesty. 1866.